

### **DETAILED ACTION**

1. This action is responsive to the Applicant's response filed 3/17/08.

As indicated in Applicant's response, claims 1, 8, 10, 16-17, 23 have been amended, and claims 2-7, 9, 11-15, 18-22 canceled. Claims 1, 8, 10, 16-17, 23 are pending in the office action.

### ***EXAMINER'S AMENDMENT***

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

3. Authorization for this examiner's amendment was given in a telephone interview with Wayne P. Bailey, Reg. # 34289 on 4/16/08.

The application has been amended as follows.

In the CLAIMS:

**refer to attached "DRAFT CLAIMS FOR ENABLING EXAMINER AMENDMENT"**

date: April 16, 08; herein submitted as file "Propsd\_Amend\_41608.pdf", pp. 1-4

### ***EXAMINER'S STATEMENT OF REASONS FOR ALLOWANCE***

4. Claims 1, 8, 10, 16-17, 23 are allowed.

The following is an examiner's statement of reasons for allowance:

The prior art taken separately or jointly does not suggest or teach the following features.

A method of improving performance in a Java program on a JVM, including deducing changes in performance that will result in modifying the Java program; wherein

(i) the cost of garbage collection is estimated using, duration of collection event, a frequency thereof; with the duration depending on amount of garbage to collect, an algorithm to do collecting/copying, heap compaction, cost of reconciling object references that are moved, and number of Java finalizers that must execute; with the frequency depending on rate of object creation, heap fragmentation, size of heap and garbage collection policy;

and (ii)

*“wherein the Java computer application program is changed by reducing memory from a footprint of the Java computer application program, wherein given an amount of memory to be reduced from the footprint ( $m$ ), a total duration for a run ( $d$ ), and how much of the run is spent in garbage collection ( $g$ ), a number of additional transactions that can be computed during the run is determined according to:*

*$y = \text{function } (m, t, g, d, f)$ , where*

*$t$  is current computed throughput of the Java computer application program in transactions/second,  $f$  is average memory footprint of the Java computer application program during duration  $d$ , and  $y$  is the number of additional transactions gained after reducing the memory footprint of the Java computer application program to  $(f - m)$  during the total duration  $d$ . ”;*

(i) and (ii) as recited in claims 1, 10, 16.

**None of the prior art** in a anticipatory or obvious manner combine to fulfill the totality of the features of (i) and mostly (ii) as recited there above, particularly respective to the *footprint* reduction involving the defined parameters  $y, m, t, g, d, f$  as specifically recited.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Conclusion***

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan A Vu whose telephone number is (571) 272-3735. The examiner can normally be reached on 8AM-4:30PM/Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lewis Bullock can be reached on (571)272-3759.

The fax phone number for the organization where this application or proceeding is assigned is (571) 273-3735 ( for non-official correspondence - please consult Examiner before using) or 571-273-8300 ( for official correspondence) or redirected to customer service at 571-272-3609.

Any inquiry of a general nature or relating to the status of this application should be directed to the TC 2100 Group receptionist: 571-272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Tuan A Vu/


Primary Examiner, Art Unit 2193

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<b><i>Application Number</i></b> 	<b>Application/Control No.</b> 10/761,991	<b>Applicant(s)/Patent under Reexamination</b> JAMISON, WILFRED CADELINA	
	<b>Examiner</b> Tuan A. Vu	<b>Art Unit</b> 2193	